Draft copy. Please cite as: Knapton, O. (in press). The linguistic construction of the self in narratives of obsessive-compulsive disorder (OCD). *Qualitative Research in Psychology*.

Affiliation: King's College London
Address: Centre for Language, Discourse and Communication
School of Education, Communication and Society
Waterloo Bridge Wing, Franklin-Wilkins Building
Waterloo Campus
King's College London
London
SE1 9NH
United Kingdom

Email: olivia.knapton@kcl.ac.uk

Author bio-note: Olivia Knapton is a Lecturer in Linguistics in the School of Education, Communication and Society at King's College London. Her research interests lie in investigating subjective experiences of mental health problems, communicating public health advice and finding innovative ways to combine cognitive and discursive approaches to meaning.

The linguistic construction of the self in narratives of obsessive-compulsive disorder (OCD)

Abstract

Obsessive-compulsive disorder (OCD) is a mental health problem characterised by distressing obsessions and repetitive compulsions. The autogenous-reactive model of OCD outlines two types of obsessions: 1) reactive obsessions, which are triggered by stimuli external to the self (e.g. electrical appliances) and 2) autogenous obsessions, which are triggered by stimuli internal to the self (e.g. thoughts or memories) (Lee and Kwon, 2003). Recent research has highlighted that the role of the self may be different for the two kinds of obsession (Seo and Kwon, 2013). The current study demonstrates the differences in the linguistic construction of the self within narratives about OCD episodes involving reactive and autogenous obsessions. Narratives told by people with OCD are analysed by focusing on the entity placed as grammatical subject. It is found that, within autogenous narratives, personified thoughts and the mind are placed as grammatical subject more often than within reactive narratives. Moreover, when in subject position, the self performs more physical actions in reactive than autogenous narratives. These patterns construct the self as agentive and responsible when the obsession concerns the surroundings, as in reactive obsessions, yet potentially in need of protection when the obsession contains implications for identity, as in autogenous obsessions.

Keywords

Obsessive-compulsive disorder (OCD), autogenous-reactive, inference-based approach, narrative, linguistic analysis, self, personification

1. Introduction

Obsessive-compulsive disorder (OCD) is a debilitating mental health problem characterised by persistent, distressing obsessions and repetitive compulsions. Very often a person with OCD will experience both obsessions and compulsions; however, obsessions can occur without compulsions, and vice versa (American Psychiatric Association, 2013). Common obsessions include fears of contamination from germs, diseases or one's own 'immoral' thoughts (often responded to through washing the hands, body or items perceived as contaminated), fears of causing a catastrophic event such as a fire or burglary through negligence (often responded to by checking electrical appliances and locks), fears of deliberately harming others (often responded to by avoiding the predicted victim) and fears of negative consequences if rituals such as counting or establishing patterns among items are not performed.

In recent years, clinical approaches to OCD have begun to emphasise the importance of self-perception in the maintenance of the disorder and have tried to capture – through quantitative, inventory-based methods – how the role of the self may vary across different types of obsessions and compulsions (see Doron and Kyrios, 2005 for a review). One cognitive model that implicates a sense of self is the inference-based approach to OCD (IBA) (O'Connor et al., 2005, O'Connor and Aardema, 2012, O'Connor and Robillard, 1995), which views a fear of the self as central in some types of obsessions. Another is the autogenous-reactive model (AR) (Lee and Kwon, 2003), which describes OCD through a distinction between obsessions triggered internally and externally to the self. Despite this focus on the self in quantitative, clinical research, there is little qualitative work exploring how the self is constructed in the everyday language of people with OCD, or the possible variation in the positioning of the self,

obsessions and wider experiences of OCD across different types of obsessions and compulsions.

Drawing on ideas from the AR model and the IBA, this study qualitatively explores the linguistic construction of the self, mental activity and a distrust of the senses within narratives told by people with OCD. It is demonstrated that the self tends to be positioned differently within the narratives depending on the content of the obsession; and that the linguistic construction of one's mind and one's thoughts potentially varies depending on implications for one's sense of self. This study also argues for the utility of researching OCD experiences through qualitative methods.

2. The self and OCD

The role of the self in OCD is complex and multifaceted. Clinical research based on the cognitive-behavioural model of OCD (Salkovskis, 1985, 1989) has argued that the content of distressing thoughts is often interpreted as revealing undesirable aspects of one's character, such as a tendency towards aggression or negligence (Rachman, 1997) despite the person not being aggressive, negligent or in any way wanting to perform the acts they have obsessed about. The cognitive-behavioural model posits that nearly everybody will have distressing thoughts from time to time, thus it is not the occurrence of distressing thoughts per se that causes OCD. Rather, distressing thoughts become obsessions through the person's appraisal of those thoughts. For example, a distressing thought such as *the house might burn down* can become an obsession if it is appraised in ways such as *it's my responsibility to ensure the house doesn't burn down* or *I am a negligent and irresponsible person if the house burns down*. Obsessions can thus pose a threat to the person's perceptions of themselves (Bhar and Kyrios,

2007), with thoughts rated as more upsetting causing a higher level of damage to self-perceptions (Rowa et al., 2005).

Research has also found that obsessions experienced as severe by those with OCD tend to be thoughts that are strongly ego-dystonic (i.e. in opposition to the values and beliefs held by the person) (Purdon and Clark, 1999) and thoughts that threaten personally significant areas of experience (e.g. relationships) (Doron et al., 2012, Doron et al., 2013). Additionally, people whose obsessions contain 'repugnant' themes such as aggressive acts and sexual deviance (Moulding et al., 2014) often experience a fear of the self, and are more likely to reach negative conclusions about themselves based on their thoughts compared to anxiety disorder and non-clinical controls (Ferrier and Brewin, 2005). Thus, research into self-perceptions and the ways in which obsessions can threaten a positive sense of self or reinforce a negative sense of self can help to shed light on the nuances of the role of the self in OCD and potentially inform treatment providers of possible strategies for addressing this sensitive issue. Research into the role of the self in OCD has been a central part of the development of two, more recent cognitive models of OCD than the cognitive-behavioural model - the autogenous-reactive (AR) model and the inference-based approach (IBA).

2.1. The autogenous-reactive model

The AR model (Lee and Kwon, 2003, Lee et al., 2005) categorises OCD into two broad groups based on the content of the obsessions: *reactive* and *autogenous*. Examples of reactive obsessions include thoughts of contamination and accidents (e.g. fire) through negligence. These thoughts are not necessarily ego-dystonic and they are triggered by tangible stimuli that are external to the self; they also tend to lead to overt compulsions (such as washing or checking). In contrast, examples of autogenous obsessions include sexual, immoral, blasphemous or aggressive themes. These thoughts are strongly ego-dystonic and are not

sparked by external triggers; instead, they are often activated by memories, mental images and other thoughts that are experienced as an 'internal' part of one's self. The person often attempts to remove these thoughts through covert compulsions (such as mental rituals) or there may be no compulsions at all.

The difference between the role of the self in reactive and autogenous obsessions is perhaps the key element of the AR model. Whereas reactive obsessions involve the person's immediate surroundings and are concerned with predictions about external events, autogenous obsessions involve an introspective interpretation of the significance of the obsessions for one's self (Seo and Kwon, 2013). Unsurprisingly, then, recent work on the AR model has shown how autogenous obsessions are more closely related to negative appraisals of the self and are typically accompanied by a strong sense of guilt or shame (Seo and Kwon, 2013). In this study, qualitative linguistic analysis of descriptions of OCD episodes are analysed to provide new, fine-grained insights that support these differences between the experiences of the self in reactive and autogenous obsessions.

2.2. The inference-based approach

Another model that examines the self in OCD is the IBA. In the IBA, obsessions are seen as doubts that are "created and maintained by the client's way of reasoning" (O'Connor and Aardema, 2012, O'Connor et al., 2005). From this perspective, an OCD episode always starts with an initial doubt, which often takes the form of *maybe* or *perhaps*. The doubt then leads to a conditional hypothesis, which often takes the form of *if p, then q*. For example, a person's triggering stimulus could be leaving the house, the doubt could be *maybe I left the stove on* and the resulting hypothesis could be *if I left the stove on, then the house might burn down* (O'Connor, 2002).

The IBA claims that doubts are formed through reasoning about prior, similar situations rather than by using evidence in the actual, present situation (O'Connor et al., 2005). In terms of OCD with overt compulsions (which largely overlap with reactive obsessions in the AR model), responses to the doubt are thus ineffective because, even though they are enacted in reality, they are essentially an attempt to modify an imagined, fictive situation (O'Connor and Robillard, 1995). In relation to obsessions that have strong consequences for a sense of self (i.e. autogenous obsessions in the AR model or repugnant obsessions in the IBA), the doubt surrounds a "possible cognitive or mental state of affairs" (Aardema and O'Connor, 2007) (e.g. *I might be a paedophile*). These obsessions are self-referential, that is, they hold negative evaluations about what the self might be or could become in the future (Aardema and O'Connor, 2007, Aardema et al., 2013). With links to Possible Selves theory (Markus and Nurius, 1986), the IBA model thus argues that, for people with these kinds of ego-dystonic obsessions, the self is conceptualised as able to take on different characteristics and become something quite far removed from the current self. Therefore, in the IBA, autogenous or repugnant obsessions are driven by a fear of the *self-as-could-be;* the person becomes over-invested in this possible self and heavily distrusts the real, *self-as-is* (Aardema and O'Connor, 2007). However, as this self-as-could-be is an imagined self; the person is investing and believing in hypothetical situations.

2.3. Language, OCD and the self

In recent discourse studies, the ways in which people with OCD linguistically represent the disorder as acting independently to the self has been demonstrated. For example, Fennell and Liberato's (2007) study of responses from people with OCD to written interview questions demonstrates how OCD is often constructed as a threatening entity such as a "shark". Similarly, Knapton and Rundblad (2018) analyse written descriptions of OCD episodes to

argue that people with OCD personify not only the disorder, but also the mind, obsessions and emotions. The linguistic constructions of these externalised entities are structured by metaphors of movement that endow the mental entities with characteristics of agency and influence. For example, one participant writes that "it's ideas in my head that spark OCD behaviour most", thus bestowing his "ideas" with the ability to start an OCD episode, rather than attributing these ideas to an explicit agency of his self (Knapton and Rundblad, 2018). Despite this seeming importance of personification for OCD, no studies have examined how the use of personification may vary across different obsessions in OCD.

In the current study, linguistic constructions of the self as well as the mind, thoughts, emotions and the disorder are analysed within narratives of OCD episodes. While these various elements of OCD can be constructed in language as acting autonomously from the self, it is not necessarily the case that the person conceptualises these elements as entirely separate from the self. It may be that the person conceptualises these elements as distinguishable parts within a holistic self or, indeed, that the self is always at once all of these elements combined. Moreover, it is possible that the same linguistic constructions signify alternative conceptualisations of the self for different participants. Thus, while this study analyses the linguistic construction of the self with OCD, the study does not make claims about what conceptualisations of the self can be read from the language for each participant nor does it argue that there are one-to-one correspondences between linguistic features and conceptualisations of self.

3. OCD and narrative

As OCD episodes move through a cycle with several possible stages (i.e. from a triggering situation to an obsession, an appraisal, distress, a compulsion and resolution (Salkovskis,

1985)), it has been argued that they have a sequential structure that forms a narrative when they are recounted in language (Knapton, 2016a). However, this sequence is not to suggest that OCD episodes are linear; in fact, the stages of an OCD episode may not occur in a strict chronological order, they may be repeated several times in one episode, or they may overlap. Some people with OCD may not experience both obsessions and compulsions, and so the cycle does not have to contain all the possible stages in one episode. Moreover, the resolution of one cycle may or may not be followed by another cycle. As OCD episodes do occur frequently, their narrative reconstruction is often one that emphasises the repeated, ongoing and time-consuming nature of the obsessions and compulsions (Knapton, 2016a). By analysing the tellings of OCD episodes as narratives, the dynamic nature of doubting and reasoning can be captured as they evolve throughout the sequence. In this approach, OCD episodes are therefore regarded as holistic units that shift and fluctuate as they progress (Knapton, 2016b), which allows the subjective, idiosyncratic connections between doubts, the self and one's mental activity to come to the fore. It is clear from the claims of the IBA model that features of language, such as conditionals (e.g. *if… then*, *unless*) and modals (e.g. *might, possibly*), play an active role in constructing doubt and reasoning in OCD. While there is now some work exploring the semantic features of language as used by people with OCD (Hartman, 2018, Knapton, 2016a), there is little discussion of whether linguistic features may serve different functions when recounting OCD episodes containing different kinds of obsessions and compulsions. Furthermore, it is extremely difficult to capture the functions of these linguistic features through quantitative methods alone. Thus, to explore reasoning processes and the construction of the self, it is necessary to include qualitative methods that take individual subjectivity into account.

4. Systemic-functional approach to grammar

To analyse the linguistic construction of self, this paper draws on systemic-functional grammar (SFG) (Halliday, 1978, Halliday, 1985, Halliday and Hasan, 1985, Martin and Rose, 2003), which is an approach specifically designed for analysing grammar as it is used in different contexts and for different purposes. The key tenet of SFG is that it is not just our choice of words, but also our choice of grammar, that contributes to meaning (Halliday, 1978, Halliday, 1985).

Discourse studies that apply SFG generally agree that the information provided at the beginning of a clause is the departure point of that utterance; in other words, it tells the listener/reader what that clause is going to be about. This departure point is known as the 'theme' of the clause (Halliday, 1985). By definition, the theme of the clause runs from the beginning of the clause up to and including the first element that tells us something about the content, that is either a participant involved in the action (i.e. a noun phrase), the process performed (i.e. a verb phrase) or a piece of background information (usually a prepositional phrase or adverbial) (Halliday, 1985). For example, in the clause *I left the stove on*, the theme is *I* as this is the first element of the clause that gives some content (i.e. the participant involved). In the clause *last week I left the stove on*, the theme is *last week*, again because this is the first element of the clause that provides content (i.e. background information about the time). However, we see that it is only in the clause *I left the stove on* that the theme (*I*) is the same as the grammatical subject.

As English has a subject-verb-object clause structure, spoken conversational utterances tend to begin with the grammatical subject or with a conjunction (e.g. *and, but, so,* which are not classified as content words) followed by the grammatical subject. Thus, in spoken language, the theme is very often the information that is placed in the subject position

of the clause. In brief, for spoken conversational language, the grammatical subject and the theme are very often one and the same. Therefore, if we analyse the themes of spoken utterances, it is likely that we will also be analysing the grammatical subjects. Changing the information in the grammatical subject can thus create a different focus for the clause. For example, the clause *my thoughts overwhelm me* signals that the clause is about *my thoughts* by placing this noun phrase as the theme of the clause (i.e. at the beginning), which in this case also places it in subject position. A passive clause such as *I am overwhelmed by my thoughts* would signal that the clause is about the self, who is positioned as the theme through the pronoun *I*. Again, the theme is also the grammatical subject. Therefore, through varying the entity in subject position, the speaker can alter the departure point of the clause and thus signify different topics. Examining spoken language used by people with OCD can allow an investigation into which entities are frequently placed in the subject position, and thus are likely to be the speaker's focus of that clause. Considering the differences in the perceptions of self between people with reactive and autogenous obsessions, it is possible that there may be differences between the kind of entities placed in the subject position within the themes of clauses and the ways in which they highlight, or not, the role of self.

5. Aims

To recap, this study aims to show how doubting, the self and mental activities are linguistically constructed in narratives of OCD episodes. By examining the entities placed in subject position within the themes of clauses, the ways in which the self is positioned differently in narratives of autogenous and reactive episodes are demonstrated. Quantitative overviews of results are presented in addition to qualitative analysis of one reactive narrative and one autogenous narrative, which have been selected for their illustrative nature.

6. Methods

6.1. Ethical approval

This study was granted ethical approval by the King's College London Social Sciences, Humanities and Law research ethics sub-committee (Ref: SSHL/10/11-4). Pseudonyms were used at all stages from transcription to publication.

6.2. Recruitment and participants

Two charities in the UK (OCD Action and OCD-UK) uploaded a recruitment advert onto their websites and then potential participants contacted the researcher directly. Participants had to be age 18 or over and speak English fluently. Every participant had a clinical diagnosis of OCD, and participants were not excluded if they had diagnoses of additional mental health problems. Fifteen participants with OCD were recruited between July 2011 and December 2011; demographic information can be found in Table 1.

Table 1: Demographic information of participants

	Gender	Age	Ethnicity	Occupational status*
1	F	39	White UK/ White non-UK	unemployed
2	M	34	Not stated	unemployed
3	F	35	White UK	full time parent
4	F	48	White UK	full time parent
5	F	23	Not stated	student
6	F	24	White UK	student
7	F	46	White UK	student
8	M	56	White UK	sales & customer service
9	M	36	White UK	skilled trade
10	F	30	White UK	administrative & secretarial
11	F	33	White UK	administrative & secretarial
12	F	33	White UK	administrative & secretarial
13	M	31	White UK	associate professional & technical
14	F	36	White UK	professional
15	M	41	White UK	professional

***** An open-ended question was used to ask for participants' occupations. Where stated, occupations were classified according to the British Standard Occupational Classification 2010 (Office for National Statistics (ONS)) and using the Occupation Coding Tool (Office for National Statistics (ONS)).

6.3. Data collection

Each participant completed an audio-recorded, semi-structured interview with the author of this article. Open-ended questions about the participants' experiences of OCD, the onset of OCD and public perceptions of OCD were asked in the interviews. All participants gave written informed consent to be interviewed.

6.4. Data selection

The interviews were transcribed verbatim and then recounted narratives of OCD episodes were identified from the transcripts. Few recounted episodes included details about all the possible stages in the OCD cycle (e.g. situation, obsession, etc.); for example, some episodes only included details about two stages, some about three stages and so on. For a stretch of language to be classified as a narrative, the participant needed to recount details of at least two of the stages in the OCD episode cycle so that a temporal link between stages could be identified. This also ensured that narratives about OCD episodes involving obsessions without compulsions, or compulsions without obsessions, would still be identified as narratives if they recounted details of at least two stages (e.g. the trigger and the obsession). This identification process gave a total of 254 narratives (Table 2).

To select the narratives for analysis, only those narratives that included details about a situation/trigger, an obsession and a compulsion were retained, which gave a total of 36 narratives (Table 2). These narratives were then classified into autogenous and reactive narratives based on the content of the recounted obsession; this process gave 25 reactive narratives and 11 autogenous narratives for analysis (Table 2). While one participant (Susan) recounted narratives about reactive obsessions and autogenous obsessions, all other participants only told narratives of either autogenous or reactive obsessions. As autogenous episodes are by nature more likely than reactive episodes not to involve compulsions, it could

be that the selection criteria (i.e. requiring details of a trigger, an obsession and a compulsion) led to fewer autogenous narratives than reactive narratives being selected for analysis. However, as a percentage of each participant's total number of narratives, there is no significant difference between the number of autogenous and reactive narratives selected for analysis, which suggests that there are fewer autogenous narratives in the data set overall.

Table 2: No. OCD episode narratives per participant

	No. narratives containing trigger, obsession and compulsion		No. additional narratives	Total no. narratives
	Reactive	Autogenous		
Susan	3	2	12	17
Nicola	4	-	22	26
Jessica	3	-	18	21
Clive	3	-	18	21
Deana	3	-	17	20
Angela	3	-	14	17
Michelle	2	-	15	17
Sarah	2	-	6	8
Kelly	1	-	17	18
Gary	1	-	16	17
Vicky	-	3	18	21
Matt	-	3	8	11
Lucy	-	1	13	14
Michael	-	1	12	13
Ben	-	1	12	13
Sub-total	25	11	-	-
Total	36		218	254

6.5. Data analysis

The 36 selected narratives were analysed using tools from SFG (Halliday, 1985) that focus on the entities in subject position within themes and the processes represented by the verb phrase. Each narrative was broken down into clauses, and these clauses were entered into a spreadsheet (see Figure 1 for examples). For each clause, the theme (i.e. the content information that comes first) was identified. Next, the grammatical subject was identified and, where the grammatical subject was not also part of the theme, the clause was discarded.

It is perhaps due to the nature of interview data that the grammatical subject was part of the theme in almost all clauses. For non-finite clauses where the syntax allows an ellipted subject, the subject was retrievable from the preceding clause. Finally, the verb phrase was also identified (Figure 1).

Following Rundblad (2007), the entity in subject position was coded according to its semantic meaning. For example, the pronoun *I* was coded as 'self', and lexical items such as *thoughts*, *mind* and *fears* were coded as 'mental and emotional entities'. Similarly, drawing on the principles of SFG (Halliday, 1985) (but using adapted terminology), the process represented by the verb phrase was also coded according to semantic meaning. For example, verbs such as *check* and *wash* were coded as 'physical' processes, and verbs such as *think*, *convince* and *remember* were coded as 'cognitive' processes (also Figure 1). The frequencies of all entities in subject position and all processes in the verb phrases were then summarised in tables.

Figure 1: Clause breakdown and semantic coding

Part.	Clause	Theme	Subject	Subject code	Verb phrase	Verb phrase code
Michelle	*and so I kind of have to stand there*	*and so I*	*I*	self	*have to stand*	physical
Michelle	*and count*	*and (ellipted subject)*	*I* (ellipted)	self	*count*	cognitive
Michelle	*as I'm staring at it*	*as I*	*I*	self	*'m staring*	senses

In the English language, it is not always the case that the entity in subject position is performing the process encoded in the verb phrase. For example, in passive voice (e.g. *I am overwhelmed by my thoughts)*, it is *I* who is the subject but it is *my thoughts* who are

performing the process of 'overwhelming.' Thus, for the analysis, when examining which entities are in subject position, passive clauses are included; however, when examining which processes are performed by the entities in subject position, passive clauses are removed as it is not the entity in subject position that is performing the process in a passive voice.

7. Results

Throughout these results, quantitative overviews of the 36 narratives will be provided; all raw frequencies represent the number of clauses. In total, the 36 narratives comprise 1095 clauses in which the grammatical subject is part of the theme (reactive = 715; autogenous = 380) with an average of 30 clauses per narrative (Table 3).

Table 3: No. clauses in which the subject is part of the theme per participant for reactive and autogenous narratives

	Reactive	Autogenous
Susan	138	35
Nicola	146	-
Deana	74	-
Michelle	68	-
Clive	67	-
Angela	66	-
Jessica	65	-
Sarah	48	-
Kelly	34	-
Gary	9	-
Matt	-	149
Vicky	-	114
Michael	-	35
Lucy	-	27
Ben	-	20
Sub-total	715	380
Total	1095	

In addition to the quantitative overviews presented above and in later analyses, one reactive narrative (recounted by Michelle) and one autogenous narrative (recounted by Matt) that clearly exemplify the construction of the self, mental activity and doubt are presented here

as case studies (see Mitchell, 1984). The two narratives show some similarities in that they are both characterised by a knowledgeable, rational self who is positioned in opposition to the OCD obsessions and behaviours. Moreover, in both narratives, the mind or brain is constructed as an entity that is independent to the rational self and able to override one's senses and common sense. However, as will be shown through an examination of subject positioning, the focus on the self and the personified mind or brain is dissimilar across the two narratives, largely due to differences in implications for one's values and sense of self. The two narratives are provided here in full.

7.1. The example narratives

7.1.1. Reactive

In the reactive narrative that follows, Michelle describes her doubts about leaving electrical appliances plugged in and her subsequent checking compulsions.

(1) at home
(2) I suppose I get concerned about-
(3) there's a particular socket that I plug my laptop into
(4) that is causing me some problems at the moment
(5) where I just don't trust myself to unplug it properly
(6) and so typically my last thought-
(7) I check this blinking plug socket before I go to bed
(8) and my last thought is "I can see it's switched off
(9) I can see there's no plug in there"
(10) the sensible part of me knows that that is switched off
(11) but then I'm thinking "what if that's not what I'm seeing
(12) what if I'm thinking about a memory of having seen it's switched off
(13) and my brain is putting that where I think- you know in place of what I'm seeing"
(14) and so I kind of have to stand there
(15) and count as I'm staring at it
(16) generally to number 5
(17) I like the number 5
(18) but obviously that doesn't help because I do it every day and every night
(19) so then every night becomes the same
(20) so there's not only you know "do I not trust that it's unplugged"
(21) but "am I remembering the last time I counted and checked it"

(22) so it's general thoughts that I can't trust what I see
(23) that I'm convinced that my brain sometimes plays tricks on me even though I know it doesn't
(24) but what if it did this time
(25) that's kind of fairly typical

In Michelle's narrative, the key doubt expressed in conditional constructions is "but then I'm thinking "what if that's not what I'm seeing/what if I'm thinking about a memory of having seen it's switched off/and my brain is putting that… in place of what I'm seeing" (lines 11-13). The repeated use of the phrase "what if" opens up the possibility that her memories of past sightings can become projected into her present situation. Thus, in line with the IBA, Michelle is confusing a feared situation with the actual situation at hand.

7.1.2. Autogenous

In the following autogenous narrative, Matt describes his doubts about negative thoughts becoming ingrained in his value system and the mental compulsions he performs.

(1) I know certain things that will bother me
(2) and almost like kind of-
(3) my mind
(4) knowing those things that bother me
(5) it's almost kind of like going out of its way to focus on those
(6) it's that cliché of don't think about a pink elephant
(7) naturally you're going to think about a pink elephant
(8) so it's kind of going after those things that annoy me the most
(9) it could be a variety of things
(10) and so it comes out as intrusive thoughts
(11) and my primary fear is
(12) I mean even though I know it's intrusive
(13) even though I know it's that thing of I'm kind of almost making them come out
(14) the perennial fear is that if I don't deal with them
(15) that they will somehow become part of what I actually believe
(16) so if it's an intrusive thought where it's say something negative about somebody
(17) that unless I find a way of neutralising it
(18) or tackling it

(19) or getting rid of it
(20) say by going through reasons to disprove it
(21) that it will then sort of become embedded in my psyche as that is what I actually do think

In Matt's narrative, the key hypothesis expressed in conditionals comes in lines 14-16: "the perennial fear is that if I don't deal with them [negative thoughts]/that they will somehow become part of what I actually believe". Matt's doubts are therefore about the nature of his core beliefs and values, and he positions his real, 'authentic' self as susceptible to damage from negative, unwanted thoughts. In line with the IBA, Matt is confusing a feared or undesirable version of himself with his actual self. The conjunctions "if" and "unless" construct the removal of the negative thoughts as the only viable way that Matt can protect his acceptable, real self.

The results now present the quantitative and qualitative linguistic patterns found when examining the entities in subject position.

7.2. Overview of subject position

Across all narratives, it can be seen that autogenous narratives contain more mental and emotional entities in subject position (19.7%, n=75/380) than reactive narratives (2.8%, n=20/715) (Table 4). Additionally, reactive narratives contain more items in the environment in subject position (13.1%, n=94/715) than autogenous narratives (7.1%, n=27/380), as well as more other people in subject position (reactive: 10.3%, n=74/715; autogenous: 5.5%, n=21/380) (Table 4). These linguistic patterns provide potential evidence for the contrasting foci of autogenous and reactive episodes as posited by the AR model. Whereas autogenous narratives focus on thoughts and other 'internal' elements, reactive narratives focus on objects and people in the immediate surroundings. The frequency of the self in subject position is not vastly different between reactive and autogenous narratives, however, as will

be shown in subsequent analyses, the processes performed by the self do differ across the two groups.

Table 4: Entity in subject position

Subject	Reactive: all narratives		Autogenous: all narratives		Reactive: Michelle's narrative		Autogenous: Matt's narrative	
	n	%	n	%	n	%	n	%
Self	426	59.6	206	54.2	30	63.8	13	37.1
Mental and emotional entities	20	2.8	75	19.7	5	10.6	12	34.3
Items in the environment	94	13.1	27	7.1	6	12.8	4	11.4
Other people	74	10.3	21	5.5	-	-	-	-
Dummy subject (e.g. generic *it*)	101	14.1	51	13.4	6	12.8	6	17.1
Total	715	100.0	380	100.0	47	100.0	35	100.0

When looking at the entities placed in the subject position in Michelle's and Matt's narratives (Table 4), we see that Michelle places her self as subject in 63.8% (n=30/47) of clauses, compared to Matt's 37.1% (n=13/35). Additionally, Matt places his mental and emotional entities as subject in 34.3% (n=12/35) of clauses, compared to Michelle's 10.6% (n=5/47). These figures echo the overall quantitative patterns as, within Matt's autogenous narrative, the focus of the clauses is mental and emotional entities more often than in Michelle's reactive narrative. In contrast, within Michelle's narrative, the focus of the clauses is the self more often than in Matt's narrative.

7.3. The self as subject

Looking at the self as subject across all narratives (Table 5), we can see that the self is constructed differently across the two groups. We find that the self in subject position is

more likely to perform a physical process in reactive narratives (56.5%, n=239/423) than autogenous narratives (43.8%, n=89/203). In autogenous narratives, the self is more likely to perform a being process (14.8%, n=30/203) than in reactive narratives (8.0%, n=34/423), as well as more likely to perform a cognitive process (autogenous: 30.5%, n=62/203; reactive: 21.7%, n=92/423) (Table 5). Here, the linguistic patterns again align with the AR model by suggesting that autogenous episodes focus on a stable sense of self (i.e. through 'being' processes) that exists in a delicate relationship with thoughts and the mind (i.e. thinking processes). In contrast, reactive episodes concern the physical actions of the self, thus highlighting the role of the self as attempting to manage the physical stimuli in the surroundings.

Table 5: Processes performed when the self is in subject position

Process (verb)	Reactive: all narratives*		Autogenous: all narratives**		Reactive: Michelle's narrative		Autogenous: Matt's narrative	
	n	%	n	%	n	%	n	%
Be/exist	34	8.0	30	14.8	-	-	-	-
Physical	239	56.5	89	43.8	9	30.0	7	53.8
Cognitive	92	21.7	62	30.5	11	6.7	6	23.1
Emotional	44	10.4	17	8.4	3	10.0	-	-
Senses	14	3.3	5	2.5	7	23.3	-	-
Total	423	100.0	203	100.0	30	100.0	13	100.0

*3 passive clauses removed from all reactive narratives

**3 passive clauses removed from all autogenous narratives

Comparing the processes performed by the self in Michelle's and Matt's narratives (Table 5), we can see in Michelle's reactive narrative that the self is constructed as performing a range of processes that come from the semantic domains of physical action, cognition, emotion and the senses. In contrast, when Matt's self is the subject, he is only represented as performing processes from the semantic domains of physical action and cognition. Matt's narrative follows the overall autogenous patterns by containing a strong focus on the self as thinking.

On the other hand, Michelle's narrative perhaps diverges from the overall reactive patterns by constructing the self not only as physically acting but also using her senses to monitor the surroundings.

For Michelle, the processes performed by her self occur throughout all stages of her OCD episode. For example, her physical actions (30.0%; n=9/30) are apparent in the initial trigger stage ("I check this blinking plug socket before I go to bed", line 7) as well as the subsequent compulsions ("I kind of have to stand there/and count as I'm staring at it", lines 14-15). Similarly, her obsessions are also constructed with phrases that place her self in the subject position, such as "but then I'm thinking" (line 14) and "I'm convinced that" (line 23), which recognise Michelle's own agency in her thought creation. The placement of Michelle's self as subject throughout all stages of the narrative constructs Michelle as maintaining agency as the episode progresses. In contrast, Matt does not place his self in the subject position at all when describing his triggers and the onset of the episode. In fact, 53.8% (n=7/13) of Matt's processes describe some sort of compulsion (e.g. "I find a way of neutralising it", line 17), compared to 23.3% (n=7/30) of Michelle's processes.

Michelle's narrative depicts her self as highly interactive with the space and objects around her. In particular, she uses her sight (23.3%; n=7/30) to measure the safety of her surroundings; for example, "I can see it's switched off" (line 8) and "I'm staring at it" (line 15). The dependency on her senses situates Michelle as strongly embedded within the physical location of her OCD episode (in this instance, her "home", line 1). Her senses thus allow her to monitor the external environment whilst simultaneously tying her to that location. Despite the visual evidence, Michelle describes a distrust in her senses (10.0%; n=3/30); for example, "I can't trust what I see" (line 22). Although the verb "trust" and the verb "see" are both conjugated with the self as subject, Michelle constructs a division here between two parts of

her self: a trusting part and a seeing part. Michelle's doubting sequence (lines 11-13) unfolds because the judgement made by the (dis-)trusting part of her self is strong enough to overpower the evidence from the biological, seeing part of her self. Again, there is a contrast here between Michelle's narrative and Matt's narrative. Matt does not describe his senses or any interactions with the environment around him at all; rather, his episode is constructed as independent of location and external triggers.

Within both Michelle's and Matt's narratives, the verb "know" is largely used with the self in subject position. For example, Michelle says "even though I know it [the brain] doesn't [play tricks on me]" (line 23) and, similarly, Matt says "even though I know it's that thing of I'm kind of almost making them [the thoughts] come out" (line 13). For both Michelle and Matt, the grammatical pattern of the conjunction "even though" plus the self in subject position plus the verb "know" constructs the self as aware of an 'objective' reality that stands in opposition to their obsessions. The verb "know" also implies certainty; thus, by placing the self as subject, the self is positioned as possessing certain, stable knowledge that contrasts to the uncertainty and spiralling doubts within their thoughts.

7.4. Mental and emotional entities as subject

When mental and emotional entities are depicted as performing processes other than those of being or existing, these entities are bestowed qualities of agency and action, and are thus personified. The construction of mental entities as able to think and act independently externalises the entities from the self, and there is evidence for this in both autogenous and reactive narratives. Overall, autogenous narratives do contain more personified mental and emotional entities in subject position than reactive narratives (autogenous: 8.2%, n= 31/380; reactive: 1.8%, n = 13/715).

While the number of clauses with mental and emotional entities as subject (both personified and literal) is small (n=90 without passives), we can still see from a descriptive overview (Table 6) that mental and emotional entities in both reactive and autogenous narratives are personified through performing physical actions (reactive= 65.0%, n=13/20; autogenous = 34.3%, n=24/70). In contrast, it is only within autogenous narratives that mental and emotional entities are personified through performing cognitive and emotional processes (i.e. thoughts, minds and emotions that can think and feel of their own accord). Thus, it appears that personified entities are constructed as performing a wider range of processes in autogenous than reactive narratives.

Table 6: Processes performed when mental and emotional entities are in subject position

Process (verb)		Reactive: all narratives		Autogenous: all narratives*		Reactive: Michelle's narrative		Autogenous: Matt's narrative**	
		n	%	n	%	n	%	n	%
Be/exist		7	35.0	39	55.7	1	20.0	5	45.5
Personifi-cation	Physical	13	65.0	24	34.3	4	80.0	5	45.5
	Cognitive	-	-	3	4.3	-	-	1	9.1
	Emotional	-	-	4	5.7	-	-	-	-
	Senses	-	-	-	-	-	-	-	-
Total		20	100.0	70	100.0	5	100.0	11	100.0

* 5 passive clauses removed from all autogenous narratives
** 1 passive clause removed from Matt's narrative

Examples of personified mental and emotional entities are evident in Michelle's narrative (8.5%; n=4/47) and Matt's narrative (17.1%; n=6/35) (Table 6). However, the ways in which the personified entities are constructed in the narratives is qualitatively different.

In Matt's narrative, personification is primarily used to situate his mind and his thoughts as entities that are highly autonomous. Through subject positioning, Matt constructs his mind as an extremely agentive entity that causes him distress through deliberate and considered action (e.g. "my mind/knowing those things that bother me/it's almost kind of like

going out of its way to focus on those", lines 3-5). Similarly, Michelle's personification of her "brain" (e.g. "I'm convinced that my brain sometimes plays tricks on me", line 23) constructs it as a highly disruptive agent that is actively working against her to override the contradictory evidence from her senses.

Despite this similarity across narratives of a mind or brain constructed as independent, there are differences in the processes performed by the mind or brain. In Matt's narrative, his mind creates his obsessions. He describes his mind as "going after those things that annoy [him] the most" (line 8), which gives the result that "it comes out as intrusive thoughts" (line 10). Therefore, through subject positioning, Matt's mind is constructed as having powerful control over his obsessions, and his own role in the production of his obsessions is backgrounded. In contrast, as noted earlier, Michelle's obsessions are constructed with *I* as the subject (e.g. "I'm thinking", lines 11 and 12), which acknowledges her own agency in the creation of her obsessions.

The compulsions that Matt describes in his narrative are mental strategies. Unlike his obsessions that are depicted as created by his mind, his compulsive thoughts are positioned as created by his self. At lines 17-19, Matt states "unless I find a way of neutralising it/or tackling it/or getting rid of it", which places *I* in the subject position. Matt therefore highlights his agency in producing compulsive thoughts but reduces his agency in producing obsessive thoughts. It is possible that Matt uses personification to distance those obsessions that he regards as undesirable from his 'real' or acceptable self. This potential split between undesirable obsessions and an acceptable self is further constructed by Matt in the clauses "they [the thoughts] will somehow become part of what I actually believe" (line 15) and "it [the thought] will become embedded in my psyche" (line 21). Matt therefore constructs his

acceptable self as a contained entity whose boundaries are in need of protection from the threat of these undesirable obsessions.

Matt also uses the verb *be* when his thoughts and fears are in subject position (45.5%, n=5/11) (e.g. "the perennial fear is that…", line 14; "it [the thought] is intrusive", line 12) (Table 6). While the mental and emotional entities are nominalisations, the verb *be* conjugated in present tense provides a general description rather than depicting an action. The focus here is not so much on the mental activity as an agent, but rather on representing a state of existence that is stable and unchanging.

8. Discussion

By analysing grammatical subjects that are the themes of clauses in narratives of OCD episodes, it has been shown that the self can be constructed in quite different ways in reactive and autogenous experiences, and that the differences in linguistic patterns could potentially shed light on the role of the self for different kinds of obsessions in OCD. The findings may be useful for health professionals delivering talking, cognitive-based therapies for OCD as, by examining the entities placed in subject position at the beginning of clauses, it may be possible to see which entities the person with OCD is focussing on and potentially attributing agency to. The therapist and client could perhaps work collaboratively to examine this construction of the self and to re-position agency where it is felt to be problematic. Further considerations of implications for reactive and autogenous obsessions are discussed below.

8.1. The self in reactive narratives

Within the reactive narratives in this study, the self is positioned as a highly active agent. By repeatedly constructing the self as performing physical actions, it is the self whose agency is foregrounded and it is this agency of the self that is emphasised in the role of both thought

creation and the monitoring of the surrounding environment. It thus appears that, within reactive obsessions, a fear of what might happen or a fear of a fictive situation (O'Connor and Robillard, 1995) is often linguistically constructed with a focus on the role of the self's physical actions in the creation of that situation. Clinical research on OCD has also emphasised the importance of a belief in one's personal responsibility (OCCWG, 1997) and how a sense of responsibility is especially significant for people with checking compulsions (Foa et al., 2002). Positioning the self as in charge of one's actions and thoughts could potentially be linked to a perception of the self as responsible for preventing harm or other negative outcomes. By extension, if feared outcomes do materialise, it is not inconceivable that the person could consider themselves as blameworthy (Ehntholt et al., 1999).

In therapy sessions, an elevated use of the self performing physical actions might signal to the therapist that their client is constructing themselves as agentive and responsible. Thus, one suggestion might be that the therapist and the client could work together to unpick this construction so that a sense of blame and guilt might be avoided or reduced.

8.2. The self in autogenous narratives

From the perspective of the IBA (Aardema and O'Connor, 2007), many participants in this study (such as Matt) foreground a highly undesirable and fear-inducing self-as-could-be who holds values that are incongruent with their 'real' identity (Ferrier and Brewin, 2005). Obsessions about this self-as-could-be have been linked to negative appraisals of the self (Seo and Kwon, 2013) and so it is perhaps unsurprising that, in the autogenous narratives in the current study, the self is potentially distanced from obsessive thoughts through personification. By placing the mind and thoughts (and for some people, the disorder more broadly) as the grammatical subject of active voice constructions, these mental activities become agentive entities whose actions are constructed as relatively autonomous from the

self. The responsibility for the content of the thoughts is thus potentially transferred from the real self to these agentive mental entities. However, it must be noted that the suggestions made in this discussion are speculative and based on the findings of the current study, which has a small sample size. Thus, further research would be required to test any claims about the possible functions of personification in OCD.

Like most people with OCD, people who experience autogenous obsessions generally recognise that their thoughts are their own (Aardema and O'Connor, 2007). However, subject positioning of personified mental activities might be able to show the extent to which those undesirable thoughts are removed from the agency of the perceived real self. Future studies could look at whether thoughts that are more threatening to self-perception are more likely to be represented through personification and distancing techniques.

As noted by Murphy and Perera-Delcourt (2012), many people with OCD are ambivalent towards letting go of OCD, particularly as the disorder may hold some perceived benefits, such as an increased sense of protection and control. In a similar vein, it is possible that externalisation of the mind and thoughts might offer several ways of helping the person who has OCD to deal with their obsessions. Firstly, placing the mind and thoughts outside of a contained self might perform a protective function by shielding the 'true', self-as-is from the fictive and dangerous self-as-could-be. Secondly, personification of obsessive thoughts might allow the person some level of thought control, which is commonly strived for by people without overt compulsions (Purdon and Clark, 2002). It may be the case that personification enables thought control by turning mental activities into entities that are tangible and, to some extent, malleable through compulsions. However, it might be possible that any protection from and control over the feared self that may be offered by externalisation could lead to an ambivalence towards accepting mental activity as part of the

self as a unified whole. Again, these speculative claims would need further research, particularly using data collected from therapy sessions.

As a possible practical application of the findings, a high use of personification to describe mental activities in therapy sessions might alert the therapist to the client's possible need and/or desire to create distance between their mental activities and their selves. In instances where the client is hesitant to discuss the sensitive content of their obsessions, personification might signal thoughts that are highly distressing for the person and thus require distancing techniques as a form of protection or control. The therapist and client could then work collaboratively to unravel the advantages and disadvantages of using externalisation, which might help the client to work out instances when externalisation may be problematic rather than beneficial for them.

8.3. Summary of findings and implications

Overall, the linguistic findings support the overlaps between the AR model and the IBA by demonstrating that narratives of reactive episodes recount how the actions of the self directly shape future, imagined scenarios, whereas narratives of autogenous episodes recount how the current self lives in fear of an unwanted self-as-could-be. By way of summary, Table 7 outlines the key linguistic differences and their possible implications for therapeutic practice between reactive and autogenous obsessions.

Table 7: Summary of key differences and implications for therapy

Reactive	Autogenous
Potential focus on items/objects and other people in the surroundings by placing them as grammatical subject at the beginning of clauses.	Potential focus on mental and emotional entities by placing them as grammatical subject at the beginning of clauses, with frequent use of personification.
Self as performing physical actions (particularly to monitor and control the surroundings), leading to a construction of a highly active self.	Self as performing cognitive processes (particularly to monitor and control unwanted thoughts) and being processes with less focus on physical actions.
Self often positioned as creating obsessions.	Mental entities often positioned as creating obsessions.
In therapy, possible links to a sense of the self as responsible for future scenarios and, by extension, potentially blameworthy for negative outcomes.	In therapy, possible links to a feared self-as-could-be, with personification potentially used as a way of offering protection and thought control.

8.4. Limitations and future directions

The aim of this study was to focus on fine-grained analysis; thus, the sample size is small and cautions need to be taken when generalising to the wider population. In order to verify the claims presented, further research could investigate subject positioning with participants who have been specifically recruited depending on the content of their obsessions. Furthermore, the data were collected in research interviews and so an analysis of spoken data from therapy sessions may yield additional and alternative insights. Finally, as the IBA does stress the importance of language and rhetorical devices, future studies could analyse a wider range of linguistic features within narratives of OCD.

9. Conclusions

Through a qualitative, linguistic analysis of subject positioning, this study has shown how the role of the self with OCD is constructed differently within narratives of autogenous and

reactive obsessions. Reactive narratives that describe a fear of an imagined situation tend to display a strong focus on the physical agency of the self, which potentially links to a perception of the self as responsible. In contrast, autogenous narratives that describe a fear of an imagined self often position personified thoughts and the mind as the grammatical subject of active voice constructions, ascribing agency to these mental activities and creating distance from the 'real', authentic self. This distancing technique possibly allows the person to protect the self that is experienced as real from a self that is experienced as undesirable and highly feared. These findings could allow therapists and other health professionals working with people with OCD to identify the entities that the person is focussing on and to explore their constructions of a sense of self.

Conflicts of interest

None.

Acknowledgements

The author would like to thank Gabriella Rundblad (Kings College London) and Ben Rampton (King's College London) for comments on earlier versions of this article.

References

AARDEMA, F., MOULDING, R., RADOMSKY, A. S., DORON, G., ALLAMBY, J. & SOUKI, E. 2013. Fear of self and obsessionality: development and validation of the Fear of Self Questionnaire. *Journal of Obsessive-Compulsive and Related Disorders,* 2**,** 306-315.

AARDEMA, F. & O'CONNOR, K. 2007. The menace within: obsessions and the self. *Journal of Cognitive Psychotherapy: An International Quarterly,* 21**,** 182-197.

AMERICAN PSYCHIATRIC ASSOCIATION 2013. *Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-V),* Washington, American Psychiatric Association.

BHAR, S. S. & KYRIOS, M. 2007. An investigation of self-ambivalence in obsessive-compulsive disorder. 45**,** 1845-1857.

DORON, G., DERBY, D., SZEPSENWOL, O. & TALMOR, D. 2012. Flaws and all: exploring partner-focused obsessive-compulsive symptoms. *Journal of Obsessive-Compulsive and Related Disorders,* 1**,** 234-243.

DORON, G. & KYRIOS, M. 2005. Obsessive compulsive disorder: a review of possible specific internal representations within a broader cognitive theory. *Clinical Psychology Review,* 25**,** 415-432.

DORON, G., SZEPSENWOL, O., KARP, E. & GAL, N. 2013. Obsessing about intimate relationships: testing the double relationship-vulnerability hypothesis. *Journal of Behavior Therapy and Experimental Psychiatry,* 44**,** 433-440.

EHNTHOLT, K. A., SALKOVSKIS, P. & RIMES, K. A. 1999. Obsessive-compulsive disorder, anxiety disorders, and self-esteem: an exploratory study. *Behaviour Research & Therapy,* 37**,** 771-781.

FENNELL, D. & LIBERATO, A. S. Q. 2007. Learning to live with OCD: labeling, the self, and stigma. *Deviant Behavior,* 28**,** 305-331.

FERRIER, S. & BREWIN, C. R. 2005. Feared identity and obsessive-compulsive disorder. *Behaviour Research & Therapy,* 43**,** 1363-1374.

FOA, E. B., SACKS, M. B., TOLIN, D. F., PREZWORSKI, A. & AMIR, N. 2002. Inflated perception of responsibility for harm in OCD patients with and without checking compulsions: a replication and extension. *Journal of Anxiety Disorders,* 16**,** 443-453.

HALLIDAY, M. A. K. 1978. *Language as Social Semiotic: The Social Interpretation of Language and Meaning,* London, Hodder Arnold.

HALLIDAY, M. A. K. 1985. *An Introduction to Functional Grammar,* London, Arnold.

HALLIDAY, M. A. K. & HASAN, R. 1985. *Language, Context, and Text: Aspects of Language in a Social-Semiotic Perspective,* Oxford, Oxford University Press.

HARTMAN, J. 2018. Constructions of contrast in spoken testimonials on Obsessive Compulsive Disorder. *Language and Cognition,* 10**,** 83-109.

KNAPTON, O. 2016a. Dynamic conceptualizations of threat in obsessive-compulsive disorder (OCD). *Language and Cognition,* 8**,** 1-31.

KNAPTON, O. 2016b. Experiences of obsessive-compulsive disorder (OCD): activity, state and object episodes. *Qualitative Health Research,* 26**,** 2009-2023.

KNAPTON, O. & RUNDBLAD, G. 2018. Metaphor, discourse dynamics and register: applications to written descriptions of mental health problems. *Text and Talk,* 38**,** 389-410.

LEE, H. J. & KWON, S. M. 2003. Two different types of obsession: autogenous obsessions and reactive obsessions. *Behaviour Research and Therapy,* 41**,** 11-29.

LEE, H. J., KWON, S. M., KWON, J. S. & TELCH, M. J. 2005. Testing the autogenous-reactive model of obsessions. *Depression and Anxiety,* 21**,** 118-129.

MARKUS, H. & NURIUS, P. 1986. Possible selves. *American Psychologist,* 41**,** 954-969.

MARTIN, J. R. & ROSE, D. 2003. *Working with Discourse: Meaning Beyond the Clause,* London, Continuum.

MITCHELL, J. C. 1984. Case studies. *In:* ELLEN, R. F. (ed.) *Ethnographic Research: A Guide to General Conduct.* Bingley, UK: Emerald Group Publishing.

MOULDING, R., AARDEMA, F. & O'CONNOR, K. 2014. Repugnant obsessions: a review of the phenomenology, theoretical models, and treatment of sexual and aggressive obsessional themes in OCD. *Journal of Obsessive-Compulsive and Related Disorders,* 3**,** 161-168.

MURPHY, H. & PERERA-DELCOURT, R. 2012. 'Learning to live with OCD is a little mantra I ofter repeat': understanding the lived experience of obsessive-compulsive disorder (OCD) in the contemporary therapeutic context. *Psychology and Psychotherapy: Theory, Research and Practice,* 87**,** 111–125.

O'CONNOR, K. 2002. Intrusions and inferences in obsessive compulsive disorder. *Clinial Psychology and Psychotherapy,* 9**,** 38-46.

O'CONNOR, K. & AARDEMA, F. 2012. *Clinician's Handbook for Obsessive-Compulsive Disorder. Inference-Based Therapy,* Chichester, Wiley-Blackwell.

O'CONNOR, K., AARDEMA, F. & PÉLISSIER, M. 2005. *Beyond Reasonable Doubt: Reasoning Processes in Obsessive-Compulsive Disorder and Related Disorders,* Chichester, John Wiley & Sons.

O'CONNOR, K. & ROBILLARD, S. 1995. Inference processes in obsessive-compulsive disorder. *Behaviour Research and Therapy,* 33**,** 887-896.

OCCWG 1997. Cognitive assessment of obsessive-compulsive disorder. *Behaviour Research and Therapy,* 35**,** 667-681.

OFFICE FOR NATIONAL STATISTICS (ONS). *ONS Occupation Coding Tool* [Online]. Available: https://onsdigital.github.io/dp-classification-tools/standard-occupational-classification/ONS_SOC_occupation_coding_tool.html [Accessed 30th November 2017].

OFFICE FOR NATIONAL STATISTICS (ONS). *Standard Occupational Classification 2010* [Online]. Available: https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010 [Accessed 30th November 2017].

PURDON, C. & CLARK, D. A. 1999. Metacognition and obsessions. *Clinical Psychology and Psychotherapy,* 6**,** 102-110.

PURDON, C. & CLARK, D. A. 2002. Control of thoughts. *In:* FROST, R. & STEKETEE, G. (eds.) *Cognitive Approaches to Obsessions and Compulsions: Theory, Assessment, and Treatment.* Oxford: Elsevier Science.

RACHMAN, S. 1997. A cognitive theory of obsessions. *Behaviour Research and Therapy,* 35**,** 793-802.

ROWA, K., PURDON, C., SUMMERFELDT, L. J. & ANTONY, M. M. 2005. Why are some obsessions more upsetting than others? *Behaviour Research and Therapy,* 43**,** 1453-1465.

RUNDBLAD, G. 2007. Impersonal, general, and social: the use of metonymy versus passive voice in medical discourse. *Written Communication,* 24**,** 250-277.

SALKOVSKIS, P. M. 1985. Obsessional-compulsive problems: a cognitive behavioural analysis. *Behaviour Research and Therapy,* 25**,** 571-583.

SALKOVSKIS, P. M. 1989. Cognitive-behavioural factors and the persistence of intrusive thoughts in obsessional problems. *Behaviour Research and Therapy,* 27**,** 677-682.

SEO, J. W. & KWON, S. M. 2013. Autogenous/reactive obsessions and their relationship with negative self-inferences. *Journal of Obsessive-Compulsive and Related Disorders,* 2**,** 316-321.